The specific pattern of obsessive-compulsive symptoms in patients with bipolar disorder

Article *in* Journal of Research in Medical Sciences · March 2008

Source: DOAJ

CITATIONS
10

READS
236

2 authors, including:

Amir Shabani
Iran University of Medical Sciences
77 PUBLICATIONS **488** CITATIONS

SEE PROFILE

Received: 17.8.2007 **Accepted: 17.1.2008**

Original Article

The specific pattern of obsessive-compulsive symptoms in patients with bipolar disorder

Amir Shabani, Arash Alizadeh***

Abstract

BACKGROUND: Some preliminary findings have suggested that patients with bipolar disorder show a disparate pattern of obsessive-compulsive (OC) symptoms. This study aimed to reevaluate this subject on a different sample within a different cultural background.

METHODS: The present cross-sectional study was carried out in a clinical non-experimental setting on 78 obsessive-compulsive disorder (OCD) patients; 39 with and 39 without bipolar disorder (BD). Subjects underwent a Structured Clinical Diagnostic Interview for DSM-IV (SCID-I) as well as the Yale-Brown Obsessive-Compulsive Rating Scale (Y-BOCS).

RESULTS: The diagnoses in the non-bipolar group were mostly major depressive disorder (38%) and dysthymic disorder (38%). The mean age of the bipolar group was significantly lower than that of the non-bipolars ($P<0.05$). The mean score of the Y-BOCS was not significantly different between the two groups. The mean estimated number of obsessive themes – but not compulsive ones – in the bipolar group was significantly higher than that of the non-bipolars ($P<0.0001$). The aggressive ($P<0.01$), sexual ($P<0.0001$) and religious ($P<0.05$) obsessions were significantly more prevalent, and the contamination obsession ($P<0.05$) was significantly less prevalent in the bipolar group. Also, in the bipolar group the miscellaneous compulsions ($P<0.01$) were significantly more prevalent, and the washing compulsion ($P<0.001$) was significantly less prevalent.

CONCLUSIONS: The content of OC symptoms which is not traditionally considered a helpful factor for diagnosing a psychiatric disorder might be able to lead the clinician to the diagnosis of bipolarity in a depressed patient with OCD.

KEY WORDS: Bipolar disorder, obsessive-compulsive disorder, obsessive-compulsive symptoms.

JRMS 2008; 13(2): 48-54

In the second half of the twentieth century the literature related to the obsessive-compulsive disorder (OCD) comorbidity was mainly focused on the relationship between OCD and major depressive disorder (MDD). In spite of this, the relationship of OCD and bipolar disorders had been already emphasized by French psychiatrists in the 19th century [1] and has been demonstrated by different groups of researchers in the recent years. Although three decades ago OCD was being viewed as a rare condition in patients with bipolar disorder [2], many reports have ascertained considerable comorbidity of OCD in bipolar sufferers [3-9] even more than in patients with MDD. In this regard, for instance, the

*Assistant Professor, Department of Psychiatry, Faculty of Medicine and Mental Health Research Centre, Iran University of Medical Sciences, Tehran, Iran. e-mail: amirshabani@tehranpi.org (Corresponding Author)
**Psychiatry Resident, Mental Health Research Centre, Iran University of Medical Sciences, Tehran, Iran.

analysis of the epidemiologic data of the ECA (Epidemiologic Catchment Area) [10] showed the lifetime prevalence of OCD in bipolar disorder patients, unipolar depressive disorder patients, and general population in the USA (1995) is 21%, 12.2%, and 2.5%, respectively. Also, a research on a clinical sample [11] found the frequency of OCD in bipolar and unipolar depressed patients 21.1% and 14.3%, respectively. On the other hand, assessing the reverse state to the aforementioned condition has yielded the significant frequency of individuals with bipolar disorders (especially type II) among cases with OCD too [12-14]. The relationship of OCD and bipolar disorders has been discussed regarding different aspects; e.g., induction of (hypo)mania following antidepressant drugs administration in patients with OCD [15-18], the outcome of OCD in cyclothymic patients as more severe symptoms, higher rate of relapse of mood episodes, attempted suicide, and hospitalization, and also episodic course of OCD in bipolar disorder patients [1,19], different severity or frequency of obsession-compulsion between manic and depressive episodes of bipolar disorder [20-22], different rates of comorbidity with OCD between bipolar type I and type II disorders [13,14,23], more comorbidity with OCD in patients with mixed mania than with pure mania [24], and the efficacy of mood stabilizers to treat OCD in bipolar disorder patients [25]. One of the interesting subjects regarding the relationship between OCD and bipolar disorder is the disparate pattern of obsessive-compulsive (OC) symptoms in patients with bipolar disorder. Perugi et al [13] assessed the pattern of OC symptoms in 315 depressed outpatients with OCD, and found that bipolar disorder cases have sexual and religious obsessions more, and ordering compulsions less than non-bipolar individuals. In another similar study [26], the same group replicated the results. Also, based on a 3-year-follow up of 68 OCD individuals in a major depressive episode (MDE), Perugi et al [27] reported that sexual obsessions are more frequent and ordering compulsions are less frequent than in unipolar patients. Therefore, bipolar-OCD patients seem to have a disparate pattern of OC symptoms in comparison with other patients with OCD. However, it should be noted that the above findings are still preliminary and need to be replicated by other researchers in different settings and especially in different cultures considering the content of OC symptoms would be affected by factors such as culture, religion, and locality [28]. This study aimed to reassess this subject on a clinical sample of Iranian patients.

Methods

This study was approved by the Research Committee of the department of psychiatry, medical school, Iran University of Medical Sciences, Tehran, Iran. This was a cross-sectional study, which was carried out on outpatients and inpatients referred to two university affiliated hospitals, Iran Hospital of Psychiatry and Rasoul Akram Medical Center, Tehran, Iran. Patients referred to the mentioned centers between October 2006 and March 2007 and diagnosed having current OCD by a psychiatrist, were assessed by a trained psychiatry resident (A. A.). He assessed the inclusion and exclusion criteria for the study, registered the demographic data, and interviewed with patients through the Structured Clinical Interview for DSM-IV (SCID-I, Clinician Version) [29]. The Persian translation, back translation, and feasibility, reliability, and validity study had been conducted by Sharifi et al [30]. Inclusion criteria included: 1- aged 18-65, 2- being Persian speaking, 3- confirmation of current OCD diagnosis according to the clinical interview, and 4- giving informed consent to participate in the study. *Exclusion criteria* included: 1- a severe disorder either in terms of behavior, communication or language that made the interview almost impossible (e.g., mental retardation, dementia, irritability, and agitation), 2- current psychosis, 3- "poor insight" of OCD based on the clinical interview, 4- history of tic disorder (because of the association of this disorder and the specific OC symptoms [31], which could make a bias in the results), 5- the existence of three psychiatric comorbidity (i.e., the probands must have OCD and only one or no

other psychiatric disorder), 6- being in a mood episode (current diagnosis of a mood episode) according to the clinical interview (i.e., the inpatient probands were not admitted because of a mood episode), and 7- lifetime diagnosis of substance abuse disorders (with the exception of nicotine and caffeine). Therefore, the patients were included in two groups: 1- individuals with current OCD and a lifetime diagnosis of bipolar disorder (bipolar-OCD), and 2- individuals with current OCD without a history of bipolar disorder (non-bipolar-OCD). The sampling was in convenience method and was continued until provided the same number of cases in the two groups. All participants were also administered the Yale-Brown Obsessive-Compulsive Rating Scale (Y-BOCS) and its symptoms checklist [32,33] through a clinical interview. This scale is widely used and has good validity and reliability [32,33]. Also, its test-retest reliability (0.84) and convergent validity with the Maudsley Obsessive-Compulsive Inventory (0.78) have been assessed on Iranian population [34]. Therefore, patients were assessed for the severity of OC symptoms and the types of the symptoms were registered. Data were analyzed with the Statistical Package for the Social Sciences (SPSS for Windows 12.0). Baseline group differences were evaluated using independent samples t-tests for continuous variables and chi-square tests for categorical variables. The logistic regression analyses were used appropriately.

Results

Sample characteristics

All patients completed the study, with no drop-out. Thirty nine patients with bipolar-OCD and 39 patients with non-bipolar-OCD were entered into the study. The mean age of the first group was 26.6 (SD: 7.23), and of the second group was 30.1 (SD: 6.52); there was a significant difference between them (t = 2.20, df = 76, p = 0.03). Other demographic and clinical information are presented in table 1. Of 39 patients with bipolar-OCD, 16 (41%) had bipolar I disorder (BID) and 23 (59%) had bipolar II disorder (BIID). The types of comorbidity in the non-bipolar-OCD group comprised of MDD (38.2%), dysthymic disorder (38.2%), panic disorder (7.7%), generalized anxiety disorder (5.1%), and social phobia (5.1%); 5.1% of the individuals had no psychiatric comorbidity.

Table 1. Demographic and clinical information of the probands.

Variables	bipolar-OCD (n=39)	non-bipolar-OCD (n=39)	p-value
Female	30(76.9%)	33 (84.6%)	0.389
Marital status			<0.0001
Single	27 (69.2%)	13 (33.3%)	
Married	9 (23.1%)	26 (66.7%)	
Widow	3 (7.7%)	0 (0%)	
Employment			0.784
Employed	9 (23.1%)	8 (20.5%)	
Unemployed	30 (76.9%)	31 (79.5%)	
Outpatient	31 (79.4%)	26 (66.7%)	0.202

$\chi^2 = 0.743$, df = 1; $\chi^2 = 0.075$, df = 1; $\chi^2 = 1.629$, df = 1; $\chi^2 = 16.15$, df=2

The findings of the obsessive-compulsive scale

The mean score of the Yale-Brown Obsessive-Compulsive Rating Scale was 28.53 ± 5.09 in the bipolar-OCD, and 28.25 ± 6.79 in the non-bipolar-OCD individuals, respectively. The two groups had no significant difference. The mean (± SD) estimated numbers of obsessive themes in the bipolar and the non-bipolar groups were 3.17 (± 1.53) and 1.92 (± 0.66), respectively (t = 0.3, df = 4.7, P<0.0001). The mean (± SD) estimated numbers of compulsive themes were 2.38 (± 1.54) in the bipolar group, and 2.64 (± 1.53) in the non-bipolar group, re-

spectively. Comparing the numbers of compulsive themes did not show any significant difference at P<0.05 level. Table 2 displays the types of OC symptoms in the bipolar and non-bipolar groups. The aggressive, sexual and religious obsessions were significantly more prevalent, and the contamination obsession was significantly less prevalent in the bipolar group. Also, the miscellaneous compulsions were significantly more prevalent, and the washing compulsion was significantly less prevalent in the bipolar group in comparison with the non-bipolar group. Given that age and marital status of the two groups had statistical significant difference, the logistic regression was used to evaluate the effect of two mentioned factors on the OC symptoms differences between the two groups. However, there was not any significant effect of age and marital status.

Table 2. The types of obsessive-compulsive (OC) symptoms in the bipolar and non-bipolar groups.

Types of OC symptoms	bipolar-OCD (n=39)	non-bipolar-OCD (n=39)	$\chi 2$	df	p-value
Obsessions					
Aggressive	14 (35.9%)	3 (7.7%)	9.01	1	0.005
Contamination	25 (64.1%)	33 (84.6)	4.3	1	0.03
Sexual	34 (87.2%)	0 (0%)	60.27	1	0.0001
Hoarding	6 (15.4%)	7 (17.9%)	0.09	1	0.76
Religious	15 (38.5)	6 (15.4%)	5.27	1	0.04
Symmetry	13 (33.3%)	17 (43.6%)	0.86	1	0.35
Somatic	5 (12.8%)	4 (10.3%)	0.12	1	1
Miscellaneous	12 (30.8%)	5 (12.8%)	3.68	1	0.055
Compulsions					
Washing	19 (48.7%)	33 (84.6%)	11.3	1	0.001
Checking	18 (46.2%)	24 (61.5%)	1.85	1	0.17
Rituals	9 (23.1%)	9 (23.1%)	0.0001	1	1
Counting	5 (12.8%)	4 (10.3%)	0.12	1	1
Ordering	16 (41%)	16 (41%)	0.0001	1	1
Hoarding	5 (12.8%)	7 (17.9%)	0.39	1	0.54
Miscellaneous	21 (53.8%)	10 (25.6%)	6.47	1	0.01

Discussion

Following the previous findings about existing a disparate pattern of OC symptoms in patients with bipolar-OCD, the present study focused on this subject to reevaluate it on a different sample with a different culture; especially considering this fact that the replications of the preliminary findings have been carried out by the same primary researchers. Therefore, this study explored the OC symptoms pattern and compared the symptoms pattern and the number of OC themes in bipolar- and non-bipolar-OCD patients. However, some features discriminate the present study from the other ones; excluding the cases of current psychosis, historical tic disorders, poor insight, more than one comorbid disorder with OCD, and being in a mood episode created a more pure sample with less confounder factors. Perugi et al [13] studied 315 depressed outpatients with OCD and found that patients with bipolar-OCD have a significantly higher rates of sexual and religious obsessions, and a significantly lower rate of checking rituals. The same researchers [27] during a 3-year-follow-up of 68 patients with comorbid DSM-IV diagnoses of OCD and major depressive episode admitted and treated at a day-hospital, demonstrated that there are a significantly higher rate of sexual obsessions and a significantly lower rate of ordering rituals in bipolar-OCD patients. Our findings about overcoming sexual and religious obsessions in bipolar disorder patients, replicate the previous data [13,27]. A study on

adolescents by Masi et al [35] showed that the mean number of *obsessive themes* in the patients suffering from bipolar-OCD is non-significantly higher than that in the pure OCD patients. The present study also demonstrated the latter finding but statistically significant. The other finding of the Masi et al study was to be lower of the mean number of *compulsive themes* significantly in the patients with bipolar-OCD than that in the pure OCD individuals. This result was not replicated at the present study, although the mean number of compulsive themes was still a little and non-significantly less in the bipolar group. The study reinforces the previous findings aforementioned at two above paragraphs. It should be noted that some transcultural differences regarding OC symptoms have been reported [36,37], but the present findings do not show an obvious difference from the western researches. However, there are some diversity among the findings of the studies; for example, higher frequency of aggressive obsession and lower frequency of contamination obsession and washing compulsion were seen in bipolar group only based on the present study, while the lower rate of ordering [27] and checking [13] compulsions in the bipolar disorder patients have been reported in the past. It is interesting that although some differences among the findings of various studies are observed, there is almost no contradictory data. It is also true in the matter of the results of comparing the mean number of obsessive and compulsive themes between bipolar and non-bipolar disorder patients in two studies (see above). Given the overall consistency in results, it seems that the little variability in findings could at least partially be attributed to the low sample size. However, the low sample size is an important limitation for external validity of this study. We here submit the idea that the content of OC symptoms, which is not traditionally considered a helpful factor for diagnosing a psychiatric disorder might be able to lead the clinician to the diagnosis of bipolarity in a depressed patient with OCD. In other word, as to a client with MDE and OCD with sexual, religious, and maybe aggressive obsessions in association with several different obsessions at the same time, the clinician should keep in mind the probability of having a patient with bipolar disorder. There is mounting clinical evidence that some clinical and individual characteristics may predict the change of diagnosis from MDD to BD [38-40]. However, clinical findings that could be used as new predictors of bipolar spectrum disorders could be helpful for future investigations. The present finding that suggests a new probable predictor of bipolar spectrum disorder must be considered preliminary because of some methodological limitations and need to be replicated in a longitudinal study and on larger samples especially through random sampling. Another limitation in this study was that only respondents were interviewed and not their relatives. Therefore, underestimating of (hypo)manic symptoms during the clinical interview might have occurred, because these symptoms often are experienced as normal by the patient, but the family members may provide more relevant information. However, the interviews in this study (SCID) were carried out according to Benazzi and Akiskal advice [41] to increase the chance of detecting patients with bipolar disorder. According to this advice, if the patient answered to the screening question about past (hypo)manic episodes as negative, the clinician must have always questioned about all the other DSM-IV non-mood (hypo)manic symptoms. Also, the clinician could use the past information of the patients on the hospital notes during the interview. Our final suggestion is the repetition of the study on the general population. Such a study could include broader spectrum of patients - including milder cases, patients with less supportive care givers, and so on - and could increase external validity of the present findings.

Acknowledgment

We are indebted to the patients who participated in this study. The authors thank Dr Me-

hdi Ahmadi for his help in analyzing data. The authors report no financial affiliation or other relationships relevant to the subject of this manuscript.

References

1. Hantouche EG, Angst J, Demonfaucon C, Perugi G, Lancrenon S, Akiskal HS. **Cyclothymic OCD: a distinct form?** *J Affect Disord* 2003;75:1-10.
2. Karno M, Golding JM, Sorenson SB, Burnam MA. **The epidemiology of obsessive-compulsive disorder in five US communities.** *Arch Gen Psychiatry* 1988;45:1094-1099.
3. Kruger S, Cooke RG, Hasey GM, Jorna T, Persad E. **Comorbidity of obsessive compulsive disorder in bipolar disorder.** *J Affect Disord* 1995;34:117-120.
4. Yerevanian BI, Koek RJ, Ramdev S. **Anxiety disorders comorbidity in mood disorder subgroups: data from a mood disorders clinic.** *J Affect Disord* 2001;67:167-173.
5. Albert U, Rosso G, Maina G, Bogetto F. **Impact of anxiety disorder comorbidity on quality of life in euthymic bipolar disorder patients: differences between bipolar I and II subtypes.** *J Affect Disord* 2008;105:297-303.
6. Kauer-Sant'Anna M, Frey BN, Andreazza AC, Cereser KM, Gazalle FK, Tramontina J et al. **Anxiety comorbidity and quality of life in bipolar disorder patients.** *Can J Psychiatry* 2007;52:175-181.
7. Zutshi A, Reddy YC, Thennarasu K, Chandrashekhar CR. **Comorbidity of anxiety disorders in patients with remitted bipolar disorder.** *Eur Arch Psychiatry Clin Neurosci* 2006;256:428-436.
8. Altindag A, Yanik M, Nebioglu M. **The comorbidity of anxiety disorders in bipolar I patients: prevalence and clinical correlates.** *Isr J Psychiatry Relat Sci* 2006;43:10-15.
9. Simon NM, Otto MW, Wisniewski SR, Fossey M, Sagduyu K, Frank E et al. **Anxiety disorder comorbidity in bipolar disorder patients: data from the first 500 participants in the Systematic Treatment Enhancement Program for Bipolar Disorder (STEP-BD).** *Am J Psychiatry* 2004;161:2222-2229.
10. Chen YW, Dilsaver SC. **Comorbidity for obsessive-compulsive disorder in bipolar and unipolar disorders.** *Psychiatry Res* 1995;59:57-64.
11. Pini S, Cassano GB, Simonini E, Savino M, Russo A, Montgomery SA. **Prevalence of anxiety disorders comorbidity in bipolar depression, unipolar depression and dysthymia.** *J Affect Disord* 1997;42:145-153.
12. Lensi P, Cassano GB, Correddu G, Ravagli S, Kunovac JL, Akiskal HS. **Obsessive-compulsive disorder. Familial-developmental history, symptomatology, comorbidity and course with special reference to gender-related differences.** *Br J Psychiatry* 1996;169:101-107.
13. Perugi G, Akiskal HS, Pfanner C, Presta S, Gemignani A, Milanfranchi A et al. **The clinical impact of bipolar and unipolar affective comorbidity on obsessive-compulsive disorder.** *J Affect Disord* 1997;46:15-23.
14. Perugi G, Akiskal HS, Ramacciotti S, Nassini S, Toni C, Milanfranchi A et al. **Depressive comorbidity of panic, social phobic, and obsessive-compulsive disorders re-examined: is there a bipolar II connection?** *J Psychiatr Res* 1999;33:53-61.
15. Baer L, Minichiello WE, Jenike MA. **Behavioral treatment in two cases of obsessive-compulsive disorder with concomitant bipolar affective disorder.** *Am J Psychiatry* 1985;142:358-360.
16. White K, Keck PE, Jr., Lipinski J. **Serotonin-uptake inhibitors in obsessive-compulsive disorder: a case report.** *Compr Psychiatry* 1986;27:211-214.
17. Steiner W. **Fluoxetine-induced mania in a patient with obsessive-compulsive disorder.** *Am J Psychiatry* 1991;148:1403-1404.
18. Berk M, Koopowitz LF, Szabo CP. **Antidepressant induced mania in obsessive compulsive disorder.** *Eur Neuropsychopharmacol* 1996;6:9-11.
19. Swartz CM, Shen WW. **Is episodic obsessive compulsive disorder bipolar? A report of four cases.** *J Affect Disord* 1999;56:61-66.
20. Shabani A, Ataei M, Panahi L. **Comorbidity of obsessive-compulsive disorder in manic and remission phases of bipolar patients.** *Tehran University Medical Journal* 2005;5:386-391.
21. Zutshi A, Kamath P, Reddy YC. **Bipolar and nonbipolar obsessive-compulsive disorder: a clinical exploration.** *Compr Psychiatry* 2007;48:245-251.
22. Shabani A, Eftekhar M, Abedian S. **Changes in obsessive compulsive symptoms during manic episodes: a case series.** *Iran J Psychiatry* In Press. 2007.
23. Shabani A, Sharifi V, Alaghband-rad J et al. **Is the comorbidity of obsessive-compulsive disorder with bipolar-I-disorder less than with major depressive disorder?** *Andeesheh-Va-Raftar* 2006;45:117-123.

24. McElroy SL, Strakowski SM, Keck PE, Jr., Tugrul KL, West SA, Lonczak HS. **Differences and similarities in mixed and pure mania.** *Compr Psychiatry* 1995;36:187-194.
25. Raja M, Azzoni A. **Clinical management of obsessive-compulsive-bipolar comorbidity: a case series.** *Bipolar Disord* 2004;6:264-270.
26. Pfannera C, Prestaa S, Gemignania A et al. **Comorbidity between obsessive compulsive disorder and unipolar and bipolar disorders**. *Eur Neuropsychopharmacol* 2008;6:4.
27. Perugi G, Toni C, Frare F, Travierso MC, Hantouche E, Akiskal HS. **Obsessive-compulsive-bipolar comorbidity: a systematic exploration of clinical features and treatment outcome.** *J Clin Psychiatry* 2002;63:1129-1134.
28. Akhtar S, Wig NN, Varma VK, Pershad D, Verma SK. **Socio-cultural and clinical determinants of symptomatology in obsessional neurosis.** *Int J Soc Psychiatry* 1978;24:157-162.
29. First M, Spitzer R, Gibbon M, Williams JB. **User's Guide for the Structured Clinical Interview for DSM-IV Axis I Disorders: SCID-1 Clinician Version.** Washington, DC: American Psychiatric Association; 1996.
30. Sharifi V, Assadi SM, Mohammadi MR et al. **Reliability and feasibility of the Persian version of the structured diagnostic interview for DSM-IV (SCID).** *Advances in Cognitive Science* 2004;6:10-22.
31. Como PG, LaMarsh J, O'Brien KA. **Obsessive-compulsive disorder in Tourette's syndrome.** *Adv Neurol* 2005;96:249-261.
32. Goodman WK, Price LH, Rasmussen SA, Mazure C, Fleischmann RL, Hill CL et al. **The Yale-Brown Obsessive Compulsive Scale. I. Development, use, and reliability.** *Arch Gen Psychiatry* 1989;46:1006-1011.
33. Goodman WK, Price LH, Rasmussen SA, Mazure C, Delgado P, Heninger GR et al. **The Yale-Brown Obsessive Compulsive Scale. II. Validity.** *Arch Gen Psychiatry* 1989;46:1012-1016.
34. Dadfar M, Malakouti K, Bolhari J, Mehrabi F. **The Impact of Pharmacological Treatment on Personality Disorders of Obsessive-Compulsive Patients**. *Andeesheh-Va-Raftar* 2002;8:76-87.
35. Masi G, Perugi G, Toni C, Millepiedi S, Mucci M, Bertini N et al. **Obsessive-compulsive bipolar comorbidity: focus on children and adolescents.** *J Affect Disord* 2004;78:175-183.
36. de Bilbao F, Giannakopoulos P. **[Effect of religious culture on obsessive compulsive disorder symptomatology. A transcultural study in monotheistic religions].** *Rev Med Suisse* 2005;1:2818-2821.
37. Okasha A, Saad A, Khalil AH, el Dawla AS, Yehia N. **Phenomenology of obsessive-compulsive disorder: a transcultural study.** *Compr Psychiatry* 1994;35:191-197.
38. Ghaemi SN, Ko JY, Goodwin FK. **"Cade's disease" and beyond: misdiagnosis, antidepressant use, and a proposed definition for bipolar spectrum disorder.** *Can J Psychiatry* 2002;47:125-134.
39. Katzow JJ, Hsu DJ, Nassir GS. **The bipolar spectrum: a clinical perspective.** *Bipolar Disord* 2003;5:436-442.
40. Shariat SV, Shabani A. **Sleep-related hypomanic symptoms as a predictor of bipolar spectrum disorders.** *Prim Care Companion J Clin Psychiatry* 2007;9:233-234.
41. Benazzi F, Akiskal HS. **Refining the evaluation of bipolar II: beyond the strict SCID-CV guidelines for hypomania.** *J Affect Disord* 2003;73:33-38.